Claims:

1. 1-(Azolin-2-yl)amino-1,2-diphenylethane compounds of the general formula (I):

$$(R^{1})_{n} \xrightarrow{R^{3}} \stackrel{R^{4}}{H} \stackrel{(R^{2})_{m}}{A}$$
 (I)

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wherein A is a radical of the formulae A<sup>1</sup> or A<sup>2</sup>:

and wherein

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m

is 0, 1, 2, 3, 4 or 5;

n

is 0, 1, 2, 3, 4 or 5;

Χ

is sulfur or oxygen;

 $R^1$ ,  $R^2$ 

are each independently halogen, OH, SH, NH<sub>2</sub>, SO<sub>3</sub>H, COOH, cyano,

nitro,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -alkylamino, di( $C_1$ - $C_6$ -

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alkyl)amino,  $C_1$ - $C_8$ -alkylthio,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -alkenyloxy,  $C_2$ - $C_6$ -alkynyloxy,  $C_2$ - $C_6$ -alkynyloxy,  $C_2$ - $C_6$ -alkynyloxy,  $C_2$ -

 $C_6$ -alkynylamino,  $C_2$ - $C_6$ -alkynylthio,  $C_1$ - $C_6$ -alkylsulfonyl,  $C_1$ - $C_6$ -

alkylsulfoxyl, C<sub>2</sub>-C<sub>6</sub>-alkenylsulfonyl, C<sub>2</sub>-C<sub>6</sub>-alkynylsulfonyl, formyl, C<sub>1</sub>-

 $C_6\text{-alkylcarbonyl},\ C_2\text{-}C_6\text{-alkenylcarbonyl},\ C_2\text{-}C_6\text{-alkynylcarbonyl},\ C_1\text{-}C_2\text{-}C_2\text{-alkynylcarbonyl},\ C_2\text{-}C_3\text{-alkynylcarbonyl},\ C_2\text{-}C_3\text{-alkynylcarbonyl},\ C_3\text{-}C_3\text{-alkynylcarbonyl},\ C_3\text{-}C_3\text{-alkynylcarbonylcarbonyl},\ C_3\text{-}C_3\text{-alkynylcarbonylca$ 

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C<sub>6</sub>-alkoxycarbonyl, C<sub>2</sub>-C<sub>6</sub>-alkenyloxycarbonyl, C<sub>2</sub>-C<sub>6</sub>-alkynyloxy-

carbonyl, carbonyloxy,  $C_1$ - $C_6$ -alkylcarbonyloxy,  $C_1$ - $C_6$ -alkenyl-carbonyloxy,  $C_1$ - $C_6$ -alkynylcarbonyloxy, wherein the carbon atoms in

the aliphatic radicals of the aforementioned groups may carry any

combination of 1,2 or 3 radicals R#,

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 $C(O)NR^aR^b$ ,  $(SO_2)NR^aR^b$ , wherein  $R^a$  and  $R^b$  are each independently hydrogen,  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl, or  $C_2$ - $C_6$ -alkynyl, wherein the carbon atoms in these groups may carry any combination of 1, 2 or 3

radicals R#,

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a radical Y-Ar or a radical Y-Cy, wherein

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		Y is a single bond, oxygen, sulfur, C <sub>1</sub> -C <sub>6</sub> -alkandiyl or C <sub>1</sub> -C <sub>6</sub> -alkandiyloxy,  Ar is phenyl, naphthyl or a mono- or bicyclic 5- to 10-membered heteroaromatic ring, which contains 1,2, 3 or 4 heteroatoms se-
5		lected from oxygen, sulfur and nitrogen as ring members, wherein Ar is unsubstituted or may carry any combination of 1, 2, 3, 4 or 5 radicals R*; and  Cy is C <sub>3</sub> -C <sub>12</sub> -cycloalkyl, which is unsubstituted or substituted with any combination of 1, 2, 3, 4 or 5 radicals R*;
10		and wherein two radicals R <sup>1</sup> or two radicals R <sup>2</sup> that are bound to adjacent carbon atoms of the phenyl rings may form together with said carbon atoms a fused benzene ring, a fused saturated or partially un-
15		saturated 5-, 6-, or 7-membered carbocycle or a fused 5-, 6-, or 7-membered heterocycle, which contains 1, 2, 3 or 4 heteroatoms selected from oxygen, sulfur and nitrogen as ring members, and wherein the fused ring is unsubstituted or may carry any combination of 1, 2, 3, or 4 radicals R <sup>#</sup> ;
20	R <sup>3</sup> , R <sup>4</sup>	are each independently hydrogen, $C_1$ - $C_6$ -alkyl, $C_1$ - $C_6$ -haloalkyl, $C_3$ - $C_6$ -cycloalkyl, wherein the carbon atoms in these groups may carry any combination of 1, 2 or 3 radicals $R^{\#}$ ,
25		phenyl or benzyl, each unsubstituted or substituted with any combination of 1 to 5 halogen, 1 to 3 $C_1$ - $C_6$ -alkyl, $C_1$ - $C_6$ -haloalkyl, $C_1$ - $C_6$ -alkoxy or $C_1$ - $C_6$ -haloalkylthio, $C_1$ - $C_6$ -alkoxy or $C_1$ - $C_6$ -haloalkoxy groups;
30	$R^{5a}$ , $R^{5b}$ ,	$R^{5c}$ , $R^{5d}$ are each independently hydrogen, $C_1$ - $C_6$ -alkyl, $C_1$ - $C_6$ -haloalkyl, $C_1$ - $C_6$ -alkylamino, $C_1$ - $C_6$ -alkoxy, $C_3$ - $C_6$ -cycloalkyl, wherein the carbon atoms in these groups may carry any combination of 1, 2 or 3 radicals $R^{\#}$ , halogen, cyano, nitro, hydroxy, mercapto, amino,
35		phenyl or benzyl, each unsubstituted or substituted with any combination of 1 to 5 halogen, 1 to 3 $C_1$ - $C_6$ -alkyl, $C_1$ - $C_6$ -haloalkyl, $C_1$ - $C_6$ -alkoxy or $C_1$ - $C_6$ -haloalkylthio, $C_1$ - $C_6$ -haloalkylthio, $C_1$ - $C_6$ -haloalkoxy groups;
40	R <sup>6</sup>	is hydrogen, cyano, nitro, $C_1$ - $C_6$ -alkyl, formyl, $C_1$ - $C_6$ -alkylcarbonyl, $C_1$ - $C_6$ -alkoxycarbonyl, $C_1$ - $C_6$ -alkylthiocarbonyl, wherein the carbon atom
		AMENDED SHEET (ARTICLE 19)

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in the aliphatic radicals of the aforementioned groups may carry any combination of 1, 2 or 3 radicals R<sup>#</sup>,

 $C(O)NR^aR^b$ , or  $(SO_2)NR^aR^b$ , wherein  $R^a$  and  $R^b$  are as defined above, phenyl, phenyloxy, or benzyl, each of the last three mentioned radicals may be unsubstituted or substituted with any combination of 1 to 5 halogen, 1 to 3  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -haloalkyl,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -haloalkoxy groups;

- R<sup>7</sup> is hydrogen, cyano, nitro, C<sub>1</sub>-C<sub>6</sub>-alkyl, formyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, wherein the carbon atoms in the aliphatic radicals of the aforementioned groups may carry any combination of 1, 2 or 3 radicals R<sup>#</sup>,
- 15 C(O)NR<sup>a</sup>R<sup>b</sup>, or (SO<sub>2</sub>)NR<sup>a</sup>R<sup>b</sup>, wherein R<sup>a</sup> and R<sup>b</sup> are as defined above, phenyl, phenyloxy or benzyl, each of the last three mentioned groups may be unsubstituted or substituted with any combination of 1 to 5 halogen, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-haloalkylylthio, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy groups; and
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  R\* is halogen, cyano, nitro, hydroxy, mercapto, amino, carboxyl, C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>2</sub>-C<sub>6</sub>-alkenyloxy, C<sub>2</sub>-C<sub>6</sub>-alkynyloxy, C<sub>1</sub>-C<sub>6</sub>haloalkoxy, or C<sub>1</sub>-C<sub>6</sub>-alkylthio;
- 25 and the agriculturally acceptable salts thereof.
  - 2. The compounds as claimed in claim 1, wherein R<sup>3</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl.
- The compounds as claimed in claim 1 or 2, wherein R<sup>4</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, or phenyl, which is unsubstituted or substituted with any combination of 1 to 5 halogen, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylthio, C<sub>1</sub>-C<sub>6</sub>-alkoxy or C<sub>1</sub>-C<sub>6</sub>-haloalkoxy groups.
- The compounds as claimed in any of the preceding claims, wherein both R<sup>3</sup> and R<sup>4</sup> are hydrogen.
- 5. The compounds as claimed in any of claims 1 to 3, wherein R<sup>3</sup> is hydrogen and R<sup>4</sup> is selected from C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, or phenyl, which is unsubstituted or substituted with any combination of 1 to 5 halo-

## **AMENDED SHEET (ARTICLE 19)**

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gen, 1 to 3  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -haloalkyl,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -haloalkylthio,  $C_1$ - $C_6$ -haloalkoxy groups.

- 6. The compounds as claimed in any of the preceding claims, wherein A in formula 1 is a radical A<sup>1</sup>, wherein R<sup>6</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, formyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C<sub>1</sub>-C<sub>4</sub>-haloalkylcarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl or C<sub>1</sub>-C<sub>6</sub>-alkylthiocarbonyl.
- 7. The compounds as claimed in any of claims 1 to 6, wherein A in formula I is a radical A<sup>2</sup>, wherein R<sup>7</sup> is hydrogen.
  - 9. The compounds as claimed in any of the preceding claims, wherein the radicals  $R^{5a}$ ,  $R^{5b}$ ,  $R^{5c}$  and  $R^{5d}$  are each hydrogen.
- 15 10. The compounds as claimed in any of the preceding claims, wherein at least one of the radicals R<sup>5a</sup>, R<sup>5b</sup>, R<sup>5c</sup> and R<sup>5d</sup> is different from hydrogen.
  - 11. The compounds as claimed in any of the preceding claims, wherein n in formula l is 0, 1 or 2.
  - 12. The compounds as claimed in any of the preceding claims, wherein m in formula I is 0, 1 or 2.
- 13. The compounds as claimed in claim 11 or 12, wherein n+m is an integer from 1, 2, 3 or 4.
- The compounds as claimed in any of the preceding claims, wherein R¹ and R² are each independently selected from halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkyl, and phenyl, which is unsubstituted or substituted with any combination of 1 to 5 halogen, 1 to 3 C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkylthio, C₁-C₆-haloalkylthio, C₁-C₆-alkoxy or C₁-C₆-haloalkoxy groups.
- 15. A method of combating animal pests selected from insects, arachnids and nematodes which comprises contacting said animal pests, their habit, breeding ground, food supply, plant, seed, soil, area, material or environment in which the animal pests are growing or may grow, or the materials, plants, seeds, soils, surfaces or spaces to be protected from attack or infestation by insects, arachnids or nematodes with a pesticidally effective amount of at least one 1-(azolin-2-yl)amino-1,2-diphenylethane compound of the general formula I as defined in claim 1 and/or at least one salt thereof.

- 16. A method for protecting crops from attack or infestation by insects, arachnids or nematodes which comprises contacting a crop with a pesticidally effective amount of at least one 1-(azolin-2-yl)amino-1,2-diphenylethane compound of the general formula I as defined in claim 1 and/or at least one salt thereof.
- 17. An agricultural composition comprising at least one 1-(azolin-2-yl)amino-1,2-diphenylethane compound of the general formula I as defined in claim 1 and/or at least one salt thereof and a solid or liquid carrier.

18. Compounds of the formula V

$$(R^{1})_{n} \xrightarrow{R^{3}} (R^{4})_{m}$$

$$NH \qquad (V)$$

$$R^{5a} \qquad (V)$$

$$R^{5c} \qquad (V)$$

- wherein n, m, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5a</sup>, R<sup>5b</sup>, R<sup>5c</sup> and R<sup>5d</sup> are as defined in claim 1.
  - 19. Compounds of the formula Va

$$(R^{1})_{n} \xrightarrow{R^{3}} R^{4} \xrightarrow{H} (R^{2})_{m}$$

$$O \xrightarrow{H} NH R^{5a} R^{5b}$$

$$O \xrightarrow{N} R^{5d}$$

$$H R^{5c} R^{5d}$$

$$(Va)$$

wherein Y is halogen or OH and wherein n, m,  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^{5a}$ ,  $R^{5b}$ ,  $R^{5c}$  and  $R^{5d}$  are as defined in claim 1.

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## **AMENDED CLAIMS**

[received by the International Bureau on 11 July 2005 (11.07.2005); claims 18, 19 added]

- 16. A method for protecting crops from attack or infestation by insects, arachnids or nematodes which comprises contacting a crop with a pesticidally effective amount of at least one 1-(azolin-2-yl)amino-1,2-diphenylethane compound of the general formula I as defined in claim 1 and/or at least one salt thereof.
- 17. An agricultural composition comprising at least one 1-(azolin-2-yl)amino-1,2-diphenylethane compound of the general formula I as defined in claim 1 and/or at least one salt thereof and a solid or liquid carrier.

18. Compounds of the formula V

$$(R^{1})_{n} \xrightarrow{R^{3}} R^{4} \xrightarrow{H} (R^{2})_{m}$$

$$S \xrightarrow{NH} R^{5a} R^{5b}$$

$$R^{5c} R^{5d} OH$$

$$(V)$$

- wherein n, m, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5a</sup>, R<sup>5b</sup>, R<sup>5c</sup> and R<sup>5d</sup> are as defined in claim 1.
  - 19. Compounds of the formula Va

$$(R^{1})_{n} \xrightarrow{R^{3}} R^{4} \xrightarrow{H} (R^{2})_{m}$$

$$O \xrightarrow{H} NH R^{5a} R^{5b}$$

$$N \xrightarrow{R^{5c}} R^{5d}$$

$$(Va)$$

wherein Y is halogen or OH and wherein n, m, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5a</sup>, R<sup>5b</sup>, R<sup>5c</sup> and R<sup>5d</sup> are as defined in claim 1.